

**FARMAG INTERNATIONAL (Pty) Ltd**

P.O. Box 1523, Durban 4000 Co Reg. No. 2005/011761/07

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** FARMAG METOLACHLOR 915 S  
**Product Use:** Herbicide  
**Effective Date:** May 2014  
**Revision Date:** August 2017

**24 Hr Emergency Number:** 082 771 2712

**In case of poisoning:**

Poison Information Centre: 082 446 8946  
 Tygerberg Hospital: (021) 931 6129  
 Poison Emergency Enquiries (021) 689 5227

**In case of Spillage:**

HAZMAT: 0800 147 112

**2. COMPOSITION / INFORMATION ON INGREDIENTS**

**Common name :** Metolachlor  
**CAS Cas No:** 51218-45-2  
**Chemical Name** 2-chloro-6'-ethyl-N-(2-methoxy-1-methylethyl)aceto-o-toluidide (IUPAC)  
**Chemical Class:** Chloroacetamide  
**Use:** Control of annual grasses and some broad-leaved weeds  
**Formulation:** Metolachlor 915 g/l EC  
 Safener 32 g/l  
 Emulsifiable Concentrate

**Hazardous ingredients of toxicological concern:**

<u>Inert:</u>	<u>concern:</u>	<u>present:</u>
Metolachlor	mild irritant	915 g/l
Safener		32 g/l

**SYMBOLS:** Xi

**Indication of danger:** Irritating substance

**RISK-PHRASE(S):** R36/37/38

**3. HAZARD IDENTIFICATION****Symptoms of acute exposure**

Exposure may cause moderate irritation of eyes, skin, or respiratory tract. A skin sensitization (allergic) reaction may occur in some individuals. Exposure to the active ingredient is reported to cause headache or nausea, usually subsiding within 24 hours.

**Hazardous decomposition products**

None known

**Unusual fire, explosion and reactivity hazards**

This product is a combustible liquid.

**4. FIRST AID MEASURES AND PRECAUTIONS**

If poisoning is suspected, immediately contact a physician, the nearest hospital, or the nearest Poison Control Center. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

**Ingestion**

If victim is fully conscious, immediately give a large quantity of water to drink and induce vomiting. Never give anything by mouth to an unconscious person.

**Eye contact**

Immediately rinse eyes with a large amount of running water. Hold eye lids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

**Skin contact**

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Wash with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Remove contaminated clothing and decontaminate prior to use.

**Inhalation**

Move victim from contaminated area to fresh air. Apply artificial respiration if necessary.

**Notes to Physician**

There is no specific antidote if this product is ingested. If a large amount has been ingested and emesis is inadequate, lavage stomach. The active ingredient of this product has a high affinity for activated charcoal. Five mg/kg activated charcoal suspension (50 g/400 ml water) can be given to absorb the remaining toxicant. Skin reactions have been treated with antihistamines and ointments containing an ant-inflammatory agent. Treat symptomatically. Contact with eyes may require specialized ophthalmologic attention.

Medical condition likely to be aggravated by exposure

Individuals with allergic history or pre-existing dermatitis should use extra care in handling this product.

**5. FIRE-FIGHTING MEASURES****Fire/Explosion hazard:**

**Non-flammable.**

**Extinguishing agents:**

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Use as little water as possible. Use spray or fog. Solid stream may cause spreading. Contain water used for fire fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

**Fire fighting:**

**Flash Point** (Test Method): > 200°F

Flammable Limits (% in Air) Lower: Not Applicable

Upper: Not Applicable

**Autoignition Temperature:** Not Available

**Flammability:** Can burn in fire, releasing toxic vapors

Unusual Fire, Explosion and Reactivity Hazards

Flammable hydrogen gas may be formed on contact with incompatible metals. See "Conditions to Avoid", Section 10

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

**In Case of Fire**

Use dry chemical, foam or CO<sub>2</sub> extinguishing media. Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

**6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)****Personal precautions:**

Avoid contact with skin and eyes. Do not breathe in fumes. For personal protection see Section 8.

**Environmental precautions:**

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

**Occupational spill:**

Do not touch spilled material; stop leak if you can do it without risk. Keep out unprotected persons and animals.

**For spills:** Soak up with absorptive material such as damp earth or sand or other suitable non-combustible absorbent material. Place the material into a clean, dry container and cover for subsequent disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Prevent material from spreading by damming in with absorptive material. Do not flush spilled material into drains. Keep spectators away and upwind.

To decontaminate spill area, tools and equipment, wash with a suitable solution (i.e. organic solvent, detergent bleach or caustic). Add the solution to the drums already collected. Label drums with its content and dispose it in accordance with local regulations.

Open burning or dumping of this material is prohibited.

Do not get water inside containers.

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## 7. HANDLING AND STORAGE REQUIREMENTS

### Handling:

Avoid inhalation and contact with eyes and skin. Use with adequate ventilation. Do not handle broken packages without protective equipment. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Seek medical advice.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Worker should shower at the end of each work day. Launder all clothing before it is re-used again.

### Storage:

Store in its original container in dry, cool, well-ventilated area. Avoid excess heat. Not to be stored next to foodstuffs and water supplies. Keep out of reach of children, uninformed persons and animals. Do not contaminate other pesticides and fertilizers.

### Storage stability:

Stable for a period of 2 years under normal warehouse conditions.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Comply with occupational safety, environmental, fire and other applicable regulations.

### PERSONAL PROTECTIVE EQUIPMENT:

#### Clothing:

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

#### Gloves:

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

#### Eye protection:

The use of chemical resistant goggles or face shield is recommended.

**Emergency eye wash:** Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Off white liquid free of any lumps

**Odour:** Faint odour.

**Relative density:** 1.189 ±0.05

**Solubility in water:** Miscible with water.

**Flash point:** Not applicable

**pH:** 3 – 5

## 10. STABILITY AND REACTIVITY

### Storage stability:

Stable for up to 2 years under normal warehouse and field conditions in original packaging. Protect the product from sunlight, open flame and sources of heat.

### Stability:

Stable under normal use and storage conditions. Avoid extreme heat and contact with incompatible materials.

**Hazardous Polymerization:** Will not occur.

**Conditions to Avoid:** Spray solutions of this product should be mixed, stored and applied using only plastic, plastic-lined steel, stainless steel or fiberglass/plastic containers. Concentrate should not be stored or maintained in long-term contact with galvanized steel, carbon steel, aluminum, brass or cast iron.

**Materials to Avoid:** See "Conditions to Avoid", Section 10

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity/Irritation Studies (Finished Product)

**Acute oral LD<sub>50</sub>:** >5 000 mg/kg in rats.

**Acute dermal LD<sub>50</sub>:** > 2000 mg/kg in rats.

**Acute inhalation LC<sub>50</sub>:** > 5,19 mg/ℓ air (4 hours).

**Acute skin irritation:** Mild irritant.

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Mesotrione : Not a reproductive hazard

**Chronic/Subchronic Toxicity Studies**

Mesotrione : Animal studies showed evidence of reduced bodyweight gain, increased liver and kidney weights, blood effects (polycythemia, reduced white blood cell count) and eye effects (cataract formation, keratitis).

No known neurotoxic effects based on animal studies.

**Carcinogenicity**

Mesotrione : Not carcinogenic in animal studies. Not mutagenic

**Other Toxicity Information:** None**Toxicity of Other Components**

Ethylene Glycol (&lt; 15%)

Test results reported in Section 11 for the final product take into account any acute hazards related to the ethylene glycol in the formulation.

**Target Organs**

Active Ingredients: Eye

**12. ECOLOGICAL INFORMATION****ECOTOXICOLOGY:****Birds:**LD<sub>50</sub>: Bobwhite quail: > 2000 mg/kgLC<sub>50</sub> 8-day diet: Mallard ducks: > 5 200 mg/kg**Fish:**LC<sub>50</sub> (96 hours): Bluegill sunfish: >120 mg/l

Rainbow trout: &gt;120 mg/l

**Daphnia:**48-hour LC<sub>50</sub>: >900 mg/l**Algae:** EC<sub>50</sub>: *Selenastrum capricornutum*: 3.5 mg/l**Bees:** LD<sub>50</sub> (oral): > 11 µg/beeLD<sub>50</sub> (contact): > 9.1 µg/bee**Worms:** NOEL: >1000 mg/kg**13. DISPOSAL CONSIDERATION****Pesticide disposal:**

Open dumping or burning of this pesticide is prohibited. Waste resulting from the use of this product cannot be reused or reprocessed. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

Comply with local legislation applying to waste disposal.

**Container disposal:**

Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed.

TRIPLE RINSE empty containers in the following manner: Invert the empty container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsings to the contents of the spray tank before destroying the container in the prescribed manner.

Do not re-use the empty container for any other purpose but destroy it by perforation and flattening and bury in an approved dump site.

Prevent contamination of food, feedstuffs, drinking water and eating utensils.

Comply with local legislation applying to waste disposal.

**14. TRANSPORT INFORMATION****UN No.:** 3082**Road Transport ADR/IRD:**

Class : 9

Packaging group: III

Shipping name: HERBICIDE, LIQUID, TOXIC, N.O.S

Environmentally Hazardous Substance, NO.S. (Mesotrione 480 g/l)

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**Maritime Transport IMDG/IMO: MARINE POLLUTANT**

Class : 9

Packaging group: III

Shipping name: PESTICIDE, LIQUID, TOXIC, N.O.S

Environmentally Hazardous Substance, NO.S. (Mesotrione 480 g/l)

## 15. REGULATORY INFORMATION

**Symbol:** Xi

**Indication of danger:** Irritant

**Risk phrases:**

**R 36/37/38** Irritation to eyes, respiratory system and skin.

**Safety phrases:**

**S 1/2** Keep locked up and out of the reach of children.

**S 24/25** Avoid contact with skin and eyes.

**S 36/37/39** Wear suitable protective clothing, gloves and eye/face protection.

**S 60** This material and its container must be disposed of as hazardous waste.

## 16. OTHER INFORMATION

**Packing and Labelling:**

Packed in 1, 5, 10, 20, and 25 litre fluorinated plastic containers and labelled according to the South African regulations and guidelines.

**Disclaimer:**

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.